

CC domain (VH) of the SL15 antibody and J1182 antibody. These antibodies
 CC have strong neutralising activity for TGF beta 1 and are used for the
 CC treatment of a human or an animal suffering from a condition associated
 CC with TGF-beta 1 expression and extracellular matrix deposition such as
 CC glomerulonephritis, keloid and hypertrophic scarring, proliferative
 CC vitreoretinopathy, glaucoma drainage surgery, corneal injury and
 CC cataracts. They are used to treat asthma, fibrosis, rheumatoid arthritis
 CC and tumours associated with angiogenesis and/or metastasis such as
 CC breast, prostate, ovarian, stomach, colorectal, skin, lung, cervical
 CC and/or bladder tumours, leukaemia and/or sarcomas. They are also used to
 CC modulate the immune system and inflammatory responses and improve the
 CC immune response to infections such as hepatitis B, hepatitis C and AIDS.
 CC The present sequence is a heavy chain variable region (VH) of human J1182
 CC antibody which is capable of binding to transforming growth factor -beta
 CC 1 (TGF-beta 1)
 XX
 XX Sequence 123 AA;

Query Match 100.0%; Score 649; DB 3; Length 123;
 Best Local Similarity 100.0%; Pred. No. 7.6e-50;
 Matches 123; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 QVQLVSGGTVGPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAIVSYDGSIKYY 60
 DB 1 QVQLVSGGTVGPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAIVSYDGSIKYY 60
 QY 61 ADSVKGRFTISRDNKNTLYLQWNSLRADTAIVYCAETGEYSGYDTPASPDWGQTTVT 120
 DB 61 ADSVKGRFTISRDNKNTLYLQWNSLRADTAIVYCAETGEYSGYDTPASPDWGQTTVT 120
 QY 121 VSS 123
 DB 121 VSS 123

RESULT 2
 AAY71935
 ID AAY71935 standard; protein; 123 AA.
 XX
 AC AAY71935;
 XX
 DT 26-MAR-2001 (first entry)
 XX
 DE Heavy chain variable region (VH) of human SL15 antibody.
 XX
 KW Human; heavy chain variable region; VH; SL15 antibody; cytostatic;
 KW ophthalmological; immunomodulatory; antiinflammatory; antileukemic;
 KW antiasthmatic; transforming growth factor-beta 1; TGF-beta 1; CDR;
 KW complementarity determining region; treatment; glomerulonephritis;
 KW hypertrophic scarring; proliferative vitreoretinopathy; cataract; keloid;
 KW glaucoma drainage surgery; corneal injury; immune system; asthma; tumour;
 KW inflammatory response; angiogenesis; metastasis; leukaemia; sarcoma;
 KW fibrosis; rheumatoid arthritis; hepatitis B; hepatitis C; AIDS;
 KW Acquired immune deficiency syndrome; extracellular matrix deposition.
 XX
 OS Homo sapiens.
 XX
 XX WO200066631-A1.
 XX
 XX 09-NOV-2000.
 XX
 XX 02-MAY-2000; 2000WO-GB001679.
 XX
 XX 30-APR-1999; 99US-0131983P.
 XX
 XX (CAMP-) CAMBRIDGE ANTIBODY TECHNOLOGY.
 XX
 XX Thompson JE, Lennard SN, Wilton AJ, Braddock PSH, Du Fou SL;
 XX McCafferty JG, Conroy LA, Tempest PR;
 XX WPI; 2000-687531/67.
 XX N-PSDB; AAD02041.

BEST AVAILABLE COPY

PT Antibodies that specifically bind to transforming growth factor-beta1,
 PT useful for treating e.g. cancers and ophthalmological disorder such as
 XX cataracts and proliferative vitreoretinopathy.
 XX Claim 5; Page 77; 84pp; English.
 XX The present invention relates to specific binding members which are
 CC capable of binding to transforming growth factor-beta 1 (TGF-beta 1). The
 CC invention relates specifically to the antibodies which include the
 CC complementarity determining region 3 (CDR3) of the heavy chain variable
 CC domain (VH) of the SL15 antibody and J1182 antibody. These antibodies
 CC have strong neutralising activity for TGF beta 1 and are used for the
 CC treatment of a human or an animal suffering from a condition associated
 CC with TGF-beta 1 expression and extracellular matrix deposition such as
 CC glomerulonephritis, keloid and hypertrophic scarring, proliferative
 CC vitreoretinopathy, glaucoma drainage surgery, corneal injury and
 CC cataracts. They are used to treat asthma, fibrosis, rheumatoid arthritis
 CC and tumours associated with angiogenesis and/or metastasis such as
 CC breast, prostate, ovarian, stomach, colorectal, skin, lung, cervical
 CC and/or bladder tumours, leukaemia and/or sarcomas. They are also used to
 CC modulate the immune system and inflammatory responses and improve the
 CC immune response to infections such as hepatitis B, hepatitis C and AIDS.
 CC The present sequence is a heavy chain variable region (VH) of human SL15
 CC antibody. SL15 antibody was formerly known as Kylie. It is capable of
 CC binding to transforming growth factor-beta 1 (TGF-beta 1)
 XX
 XX Sequence 123 AA;

Query Match 94.5%; Score 613; DB 3; Length 123;
 Best Local Similarity 95.1%; Pred. No. 1.2e-46;
 Matches 117; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
 QY 1 QVQLVSGGTVGPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAIVSYDGSIKYY 60
 DB 1 EVQLVSGGTVGPGSRSLRLSCAASGFTSSYGMHWVRQAPGKLEWVAIVSYDGSIKYY 60
 QY 61 ADSVKGRFTISRDNKNTLYLQWNSLRADTAIVYCAETGEYSGYDTPASPDWGQTTVT 120
 DB 61 ADSVKGRFTISRDNKNTLYLQWNSLRADTAIVYCAETGEYSGYDTPASPDWGQTTVT 120
 QY 121 VSS 123
 DB 121 VSS 123

RESULT 3
 AAW15535
 ID AAW15535 standard; protein; 123 AA.
 XX
 AC AAW15535;
 XX
 DT 27-NOV-1997 (first entry)
 XX
 DE Anti-TGF beta-1 scFv antibody 31G9 VH domain.
 XX
 KW Transforming growth factor beta-1; TGF-beta-1; human;
 KW antibody engineering; scFv; phage display; lung fibrosis;
 KW arterial injury; proliferative retinopathy; retinal detachment;
 KW adult respiratory distress syndrome; liver cirrhosis;
 KW post myocardial infarction; post-angioplasty restenosis; scleroderma;
 KW vascular disease; cataract; glaucoma; scarring; glomerulonephritis;
 KW osteoporosis; immune disease; inflammation; rheumatoid arthritis;
 KW macrophage deficiency disease; macrophage pathogen infection; therapy.
 XX
 OS Homo sapiens.
 XX
 XX GB2305921-A.
 XX
 XX 23-APR-1997.
 XX
 XX 07-OCT-1996; 96GB-00020920.
 XX
 XX 06-OCT-1995; 95GB-00020486.

PR 19-JAN-1996; 96GB-00001081.
 XX (CAMP-) CAMBRIDGE ANTIBODY TECHNOLOGY.
 XX Thompson JE, Vaughan TJ, Williams AJ, Green JA, Jackson RH,
 XX Bacon L, Johnson KS, Wilton AJ, Tempest PR, Pope AR;
 XX WPI; 1997-215360/20.
 XX N-PSDB; AAT60381.
 XX Agent contg: antigen-binding domain of human antibody to transforming
 XX growth factor beta 1 or 2 - and nucleic acid encoding it, used to
 XX neutralise effects of TGF, e.g. for control of fibrosis, immune and
 XX inflammatory disease.
 XX Claim 16; Fig 1a(ii); 184pp; English.
 XX This polypeptide comprises the VH domain of human scFv antibody 31G9,
 XX which is specific for transforming growth factor (TGF) beta-1. It is
 XX encoded by a gene (AAT60381) isolated from a large single chain Fv
 XX library. The antigen-binding domains of human antibodies (see AAW15522-
 XX 40) to TGF beta-1 and/or beta-2 can be used to counter the adverse
 XX effects of TGF beta, such as (i) promotion of fibrosis (in dermal, ocular
 XX or keloid scarring, lung fibrosis, arterial injury, proliferative
 XX retinopathy, retinal detachment, adult respiratory distress syndrome,
 XX liver cirrhosis, post myocardial infarction, post-angioplasty restenosis,
 XX scleroderma, vascular disorders, cataract, glaucoma, or esp. neural
 XX scarring and glomerulonephritis, also (not claimed) osteoporosis), or
 XX (ii) immune and inflammatory diseases (e.g. rheumatoid arthritis), or
 XX macrophage deficiency diseases or macrophage pathogen infection). Nucleic
 XX acids encoding human antibody VH and VL can be used for prodn. of
 XX recombinant antigen-binding domains. These are highly specific, have low
 XX dissociation constants (pref. less than 5 nM) and low IC50s for
 XX neutralisation
 XX Sequence 123 AA;
 XX
 XX Query Match 92.9%; Score 603; DB 2; Length 123;
 XX Best Local Similarity 94.3%; Pred. No. 9.1e-46;
 XX Matches 116; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
 XX
 XX 1 QVQLVSGGGVQVQGRSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAIVSDGSIKYY 60
 XX 1 QVQLVSGGGVQVQGRSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAIVSDGSIKYY 60
 XX
 XX 61 ADSVKGRTISRDNKNTLYLQWNSLRARDAVYVCARTGEYSGYDTPSPDNGQGTVT 120
 XX 61 ADSVKGRTISRDNKNTLYLQWNSLRARDAVYVCARTGEYSGYDTPSPDNGQGTVT 120
 XX 121 VSS 123
 XX 121 VSS 123
 XX
 XX RESULT 4
 XX AAW71934
 XX ID AAW71934 standard; protein; 123 AA.
 XX
 XX AC AAW71934;
 XX
 XX 26-MAR-2001 (first entry)
 XX
 XX Heavy chain variable region (VH) of human CS37 antibody.
 XX
 XX Human; heavy chain variable region; VH; CS37 antibody; cytostatic;
 XX ophthalmological; immunomodulatory; antiinflammatory; antileukaemic;
 XX antisthmatic; transforming growth factor-beta 1; TGF-beta 1; CDR;
 XX complementarity determining region; treatment; glomerulonephritis;
 XX hypertrophic scarring; proliferative vitreoretinopathy; cataract; keloid;
 XX glaucoma drainage surgery; corneal injury; immune system; asthma; tumour;
 XX inflammatory response; angiogenesis; metastasis; leukaemia; sarcoma;
 XX fibrosis; rheumatoid arthritis; hepatitis B; hepatitis C; AIDS;
 XX Acquired immune deficiency syndrome; extracellular matrix deposition.

BEST AVAILABLE COPY

XX Homo sapiens.
 XX OS
 XX EN W0200066631-11.
 XX PD 09-NOV-2000.
 XX XX 02-MAY-2000; 2400WO-GH001679.
 XX XX 30-APR-1999; 99US-0131983P.
 XX (CAMP-) CAMBRIDGE ANTIBODY TECHNOLOGY.
 XX Thompson JE, Lenhard SN, Wilton AJ, Braddock PSH, Du Fou SL;
 XX McCafferty JG, Chnroy LA, Tempest PR;
 XX WPI; 2000-687531/67.
 XX N-PSDB; AAD02040.
 XX Antibodies that specifically bind to transforming growth factor-beta1,
 XX useful for treating e.g. cancers and ophthalmological disorder such as
 XX cataracts and proliferative vitreoretinopathy.
 XX Example 1; Page 76; 84pp; English.
 XX The present invention relates to specific binding members which are
 XX capable of binding to transforming growth factor-beta 1 (TGF-beta 1). The
 XX invention relates specifically to the antibodies which include the
 XX complementarity determining region 3 (CDR3) of the heavy chain variable
 XX domain (VH) of the SL15 antibody and J182 antibody. These antibodies
 XX have strong neutralising activity for TGF beta 1 and are used for the
 XX treatment of a human or an animal suffering from a condition associated
 XX with TGF-beta 1 expression and extracellular matrix deposition such as
 XX glomerulonephritis, keloid and hypertrophic scarring, proliferative
 XX vitreoretinopathy, glaucoma drainage surgery, corneal injury and
 XX cataracts. They are used to treat asthma, fibrosis, rheumatoid arthritis
 XX and tumours associated with angiogenesis and/or metastasis such as
 XX breast, prostate, ovarian, stomach, colorectal, skin, lung, cervical
 XX and/or bladder tumours, leukaemia and/or sarcomas. They are also used to
 XX modulate the immune system and inflammatory responses and improve the
 XX immune response to infections such as hepatitis B, hepatitis C and AIDS.
 XX The present sequence is a heavy chain variable region (VH) of human CS37
 XX antibody which is capable of binding to the transforming growth factor-
 XX beta 1 (TGF-beta 1)
 XX Sequence 123 AA;
 XX
 XX Query Match 92.9%; Score 603; DB 3; Length 123;
 XX Best Local Similarity 94.3%; Pred. No. 9.1e-46;
 XX Matches 116; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
 XX
 XX 1 QVQLVSGGGVQVQGRSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAIVSDGSIKYY 60
 XX 1 QVQLVSGGGVQVQGRSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAIVSDGSIKYY 60
 XX
 XX 61 ADSVKGRTISRDNKNTLYLQWNSLRARDAVYVCARTGEYSGYDTPSPDNGQGTVT 120
 XX 61 ADSVKGRTISRDNKNTLYLQWNSLRARDAVYVCARTGEYSGYDTPSPDNGQGTVT 120
 XX 121 VSS 123
 XX 121 VSS 123
 XX
 XX RESULT 5
 XX AAW15534.
 XX ID AAW15534 standard; protein; 123 AA.
 XX
 XX AC AAW15534;
 XX
 XX 27-NOV-1997 (first entry)
 XX
 XX Anti-TGF beta-1 scFv antibody 1-B2 VH domain.